## **REMARKS**

The Examiner is thanked for the thorough examination of the present application. The Office Action has, however, tentatively rejected all claims 1-57. In response, claims 1, 7, 13, 19, 22, 23, 30, 33, 34, 41, 44, 45, 52, 54, 55, and 57 have been amended to more particularly claim certain aspects of embodiments of the present invention. Applicant submits that no new matter is added by these amendments. These amendments render the rejections moot, by clearly defining the independent claims over the cited art. Notwithstanding, Applicant sets for the following additional distinguishing remarks.

## Rejections under 35 U.S.C. 103

Claims 1-57 are rejected under 35 U.S.C 103 (a) as allegedly unpatentable over Bush et al. (US 2003/0125996) in view of Kennedy et al. (US 6,188,989). Applicant respectfully traverses these rejections.

In regard to claims 1, 7, 13, 19, 30, 41, 52 and 55, Bush and Kennedy do not teach or suggest what the Office Action relies upon them as allegedly teaching.

Specifically, Bush and Kennedy fail to disclose, suggest, or teach, inter alia, at least the following features recited by above claims of the present application:

- "a first capacity reserved for a first device design in a first capacity management cycle, and
- a second capacity reserved for a second device design in a second capacity management cycle after the first capacity management cycle, where the second device design has a pull-in demand, and the pull-in demand represents the demand for the second device design must be manufactured as soon as possible";

(Claim 1)

"exchanging the first capacity reserved for the first device design with the second capacity reserved for the second device design"; and "directing the first capacity to meet the second device design and the second capacity to meet the first device design, such that the second device design can be manufactured as soon as possible". (Claim 7, 13)

"and the pull-in demand represents the demand for the second device design must be manufactured as soon as possible"

(Claim 19)

"where the pull-in demand represents a second device design must be manufactured as soon as possible."

(Claims 30, 41, 52, and 55)

At least the features quoted above define those claims over the cited references.

In [0017-0018] and [0031-0032], Bush discloses related parameters affecting the outcome of the simulation can be changed. For example, researchers may change the equation for demand trend, the parameters governing the wavelength and amplitude of business and seasonal cycles in demand, the parameters governing the random component of demand, the demand forecasting methods, the forecast reliability, the supply reliability, the costs associated with various decisions, such as cost to hire, release, or transfer, and the revenue and costs associated with various outcomes, such as lost business or excess capacity. Additionally, auto input is a process, which automatically provides various values, formulas, and rules to evaluate in simulation to determine the effectiveness of the values, formulas, and rules in managing capacity under both normal and extreme conditions.

The claimed embodiments, however, define a pull-in demand. It is understood

that a pull-in demand is well known in the field, and represents the demand for a device design must be manufactured as soon as possible. Nowhere does Bush disclose a "pull-in demand" or with the same property thereto.

In the claimed embodiments, capacity in different capacity management cycle can be exchanged. In the claims, the first capacity is reserved for the first device design in the first capacity management cycle. The second capacity is reserved for the second device design in the second capacity management cycle after the first capacity management cycle. In this case, the second device design is originally arranged to manufacture in the second capacity management cycle. Since the second device design has a pull-in demand representing to be manufactured as soon as possible, the first capacity originally reserved for the first device design in the first capacity management cycle can be released for the second device design, such that the second device design can be manufactured using the first capacity in the first capacity management cycle. Additionally, since the first capacity is released, the second capacity can be changed and reserved for the first device design.

In Bush, general capacity management concept is provided. Nowhere does Bush disclose the capacity exchange between device designs. Additionally, [0083-0084] of Bush only disclose the general hardware structure of a handling system comprising a processor. The claimed feature of "directing the first capacity to meet the second device design and the second capacity to meet the first device design, such that the second device design can be manufactured as soon as possible" of the invention is not disclosed in the cited references.

Further, Kennedy discloses adjusting the allocation values for sellers according

to criteria, and compute the ATP at the seller according to the supply value for seller, the allocation value for the seller, and the ATP at the parent seller of the seller. Similarly, in Kennedy, no "pull-in demand" or demand with the same property thereto is disclosed. Additionally, nowhere does Kennedy disclose the capacity exchange between device designs.

Since Bush and Kennedy fail to teach the claimed features of the embodiments, Applicant submits that claims 1, 7, 13, 19, 30, 41, 52, and 55 patently define over the cited art. Insofar as claims 2-6 depend from claim 1, claims 8-12 depend from claim 7, claims 14-18 depend from claim 13, claims 20-29 depend from claim 19, claims 31-40 depend from claim 30, claims 42-51 depend from claim 41, claims 53 and 54 depend from claim 52, and claims 56 and 57 depend from claim 55, these claims patently define over the cited art for at least the same reasons.

For at least the foregoing reasons, Applicant respectfully requests the reconsideration of the application and the timely allowance of claims.

## Cited Art

The cited art made of record, but not relied upon, has been considered but is not believed to impact the patentability of the pending claims.

## CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

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